Defense Information Infrastructure (DII)

Common Operating Environment (COE)

User's Manual (UM)
for the
Quick Weather Segment
Release 1.0 Series

20 February 2003

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1 SCOPE

1.1 Identification

This is the User's Manual for the Quick Weather Segment, developed by Fleet Numerical Meteorology and Oceanography Center (FNMOC), Monterey, CA. This software is designed to run on the following hardware and operating systems:

• Personal Computer (PC) running the Microsoft Windows NT 4.0 with Service Pack 6 or higher, Windows XP, Windows 2000 and Windows 98.

This document has been developed in accordance with the DII COE Developer Documentation Requirements, Version 2.0.

1.2 System Overview

Quick Weather is a lightweight client that provides a quick way to receive textual observation and forecast data (METARs, SPECIs and TAFs) for stations selected by the user. After configuring the program to connect to a Metcast server, the user simply enters or selects the ICAO call signs of the stations whose reports are desired, then tells the program to retrieve and display the reports.

The Quick Weather Segment includes a graphical user interface (GUI) to allow the user to select the stations to be retrieved, and a retriever process that establishes communication with a METCAST server, submits a request for the data requested, and delivers the reply to the local user. The METCAST Server comprises a separate segment.

1.3 What's New?

This section lists changes made to Quick Weather since the initial release.

Ouick Weather v1.0.0.0 initial release notes:

- The Quick Weather 1.0.0.0 installation was built with Install shield v8.0 that uses Microsoft's Windows installer. This will allow FNMOC to issue software patches as necessary to correct problems or add software enhancements to the released versions of the software.
- Quick Weather supports secure http protocol (https) and certificates.

2 REFERENCED DOCUMENTS

2.1 Government Documents

DDR-2 Defense Information Infrastructure (DII) Common Operating

23 January 1998 Environment (COE) Developer Documentation

Requirements, Version 2.0, Defense Information Systems Agency, Joint Operability and Engineering Organization

Unnumbered Software Requirements Specification for METCAST, Space and Naval Warfare Systems Command, Environmental

Systems Program Office (SPAWAR PMW-155), San Diego,

 $\mathsf{C}\mathsf{A}$

QuickWx_SVD_1000 Software Version Description (SVD) for the Quick Weather

20 February 2003 Segment, release 1.0.0.0

20 February 2003 release 1.0 Series

2.2 Non-Government Documents

World Meteorological Organization (WMO), Geneva, Switzerland

WMO 306 Manual on Codes

1995

WMO 386 Manual on the Global Telecommunications System

1992

3 SOFTWARE SUMMARY

3.1 Software Description

Quick Weather is a lightweight client that provides a quick way to receive textual observation and forecast data (METARs, SPECIs and TAFs) for stations selected by the user. After configuring the program to connect to a Metcast server, the user simply enters or selects the ICAO call signs of the stations whose reports are desired, then tells the program to retrieve and display the reports.

The Quick Weather Segment includes a graphical user interface (GUI) to allow the user to select the stations to be retrieved, and a retriever process that establishes communication with a METCAST server, submits a request for the data requested, and delivers the reply to the local user. The METCAST Server comprises a separate segment.

3.2 Software Inventory

A complete inventory of the Quick Weather software is contained in the *Quick Weather Software Version Description* listed in Section 2.1.

3.3 Software Environment

A complete description of the software environment, and a list of manuals provided with the Quick Weather software are contained in the *Quick Weather Software Version Description* listed in Section 2.1.

3.4 Software Organization and Operation Overview

The Quick Weather software has two main units:

- 1. A GUI that allows the operator to select stations and products to be retrieved for each station, as well as to create named station lists. The GUI also includes the capability to configure the software to access the requested data via a particular server.
- 2. A retriever function that transports a request to the server, waits for a reply, and delivers the requested data to the client. The operation of the retriever is essentially transparent to the user. It is initiated manually via the GUI and delivers the data in the background.

3.5 Modes of Operation

Quick Weather operates only in an interactive "On Demand" mode, retrieving and displaying data when prompted to do so by the user.

3.6 Security and Privacy

There are no security or privacy considerations peculiar to Quick Weather.

3.7 Assistance and Problem Reporting

The primary point of contact for technical assistance with Quick Weather, Metcast and JMV issues is the SPAWAR, METOC Systems Knowledge Center (MSKC), which is staffed 24 hours a day, 7 days a week.

MSKC Contact Information

| Address | | | | |
|--|---|--|--|--|
| 3560 Hull Street, San Diego, California 92152-5001 | | | | |
| Telephone | | | | |
| DSN: 524-3888 | Comm: (619) 524-3888 | | | |
| DSN FAX: 524-3240 | Comm FAX: (619) 524-3240 | | | |
| WEB Sites | | | | |
| NIPRNET: https://mskc.spawar.navy.mil | SIPRNET: | | | |
| | https://mskc.metoc.spawar.navy.smil.mil | | | |
| E-mail | | | | |
| NIPRNET: metoc@spawar.navy.mil | SIPRNET: | | | |
| | metoc@metoc.spawar.navy.smil.mil | | | |
| Internet Relay Chat (IRC) SIPRNET | | | | |
| mIRC: #MSKC Channel (monitored 24/7) | Servers: mako.npmoc.navy.smil.mil; | | | |
| | irc.ismc.sgov.gov | | | |
| Plain Language Address (PLA) | | | | |
| SPAWARSYSCEN SAN DIEGO CA//MSKC// | | | | |

How to Report Problems with Quick Weather

1. What to do if an error occurs:

- Save the error window or message by putting the cursor in the error window and pressing ALT-PrintScreen simultaneously. This will copy the error window.
- Paste the image of the error window into Word or PowerPoint and save the image as a GIF or JPG file.

2. What to put in the problem report:

- The Quick Weather software version number. This can be read from any of the Quick Weather documents located within the Start Menu/Programs/FNMOC-SPAWAR/Quick Weather Documentation folder.
- A detailed description of the problem or error.
- A list of the stations that were being retrieved in Quick Weather.
- If Dr Watson errors occur, then please include the Dr Watson Log file called drwtsn32.log. It will be located in the C:\Winnt directory on Windows NT systems, and

- in the following directory on Windows 2000 systems: C:\Documents and Settings\All Users\Documents\DrWatson\.
- 4. Send Email with attachments to MSKC at the appropriate email address listed above (NIPRNET or SIPRNET); including a detailed description of the problem, software version number, the ZIP file, image of any error messages and Dr Watson Logs.

4 ACCESS TO THE SOFTWARE

4.1 Software Setup

Quick Weather is provided on an installation CD-ROM that also contains METCAST Client and JMV (Joint METOC Viewer). During installation, the installer program searches for proxy settings (used to pass through a firewall to reach a Metcast server). If proxy settings are found they will be automatically inserted into the Quick Weather configuration file.

Start Quick Weather by double-clicking on the desktop icon that the installer created:



When Quick Weather is started for the first time, the Configuration dialog shown below will be displayed. This dialog is used to set up a connection to the Metcast server from which data will be retrieved. The server connection has to be set up only once. Thereafter, Quick Weather will not display this dialog unless you want to change the server configuration.

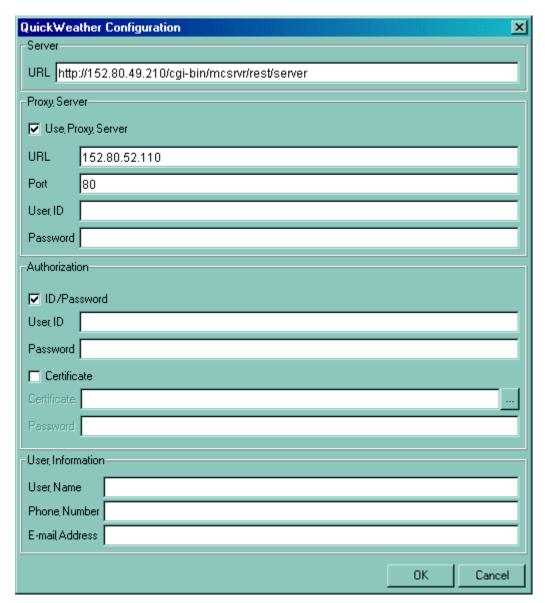


Figure 1. Configure Data Source Dialog for Quick Weather

Quick Weather is configured by default to use the Metcast server located at FNMOC. If this suits your needs, don't modify the server information. Otherwise, obtain the URL for your desired Metcast server from your System Administrator and enter it in the **Server URL** box.

As mentioned above, the installer checks for a proxy and if it finds one, inserts the proxy information (**URL** and **Port**) automatically and checks the **Use Proxy Server** checkbox. Input the **Username** and **password** for the proxy server. If you don't need to use the proxy to get to your server, uncheck the **Use Proxy Server** checkbox.

The Authorization **ID/Password** checkbox is also checked by default. If your server requires you to enter a user name and password, enter them in the appropriate boxes. Otherwise, uncheck the **Use Authorization** box.

If your server requires certificate authentication, check the **Certificate** checkbox and use the browse button (...) to navigate to the certificate file, and input the **Password** for the certificate. At this time the FNMOC server does not require certificate authentication.

User contact information is also required. Input your name, phone number (DSN preferred, if available) and your E-Mail address. The contact information will only be used to inform users about urgent issues pertaining to Quick Weather or a Metcast server.

Click the **OK** button to proceed. The **Cancel** button will close the dialog without making any changes.

4.1.1 Navigation Basics

The figure below shows a standard 2-button mouse, which provides the easiest way to navigate through the Quick Weather browser.

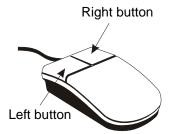


Figure 2. Two-button Mouse

The mouse has a ball on its underside that's hooked to sensors. As you push the mouse about on the mouse pad, the ball rolls and moves the sensors, which then tell the computer to move the cursor on the screen. The buttons on the mouse are used to select items from menus, or to cause some action when an active area of the screen is pointed to by the cursor. There are several different actions you can perform using the mouse buttons:

Click You click by pressing the left mouse button once and then quickly

releasing it.

Double-Click This means clicking twice in rapid succession.

Right-Click Same as a click, but using the <u>right</u> mouse button.

Drag and Drop To "drag" an object, you put the cursor over it, press and hold the left

mouse button, and move the mouse to move the object to a new location. You "drop" the object on its new location by releasing the mouse button.

Nearly all of the actions you perform using the mouse in Quick Weather can also be performed using the keyboard. When you select a station from the station list, for example, you can either click on the **Add->** button or press the **Enter** key to move the station into the Selected Stations

list. You can also use the arrow keys to move between the buttons, then press the **Enter** key to perform the action associated with the selected button.

4.1.1.1 Windows Controls

Check Boxes are selectors for individual items. They often come in sets; more than one box in the set may be selected at a time. A selected check box displays a "✓" or an "X", while an unselected check box is blank. The picture below shows a set of check boxes.



Figure 3. Check Boxes

Dialog Boxes are windows with controls that allow you to interact with the program by making selections, typing in information, using check boxes, or clicking on buttons. A typical dialog box is shown in Figure 4. This is the Quick Weather browser, and it contains type-in boxes, list boxes, and buttons to help you select, download, and view data.

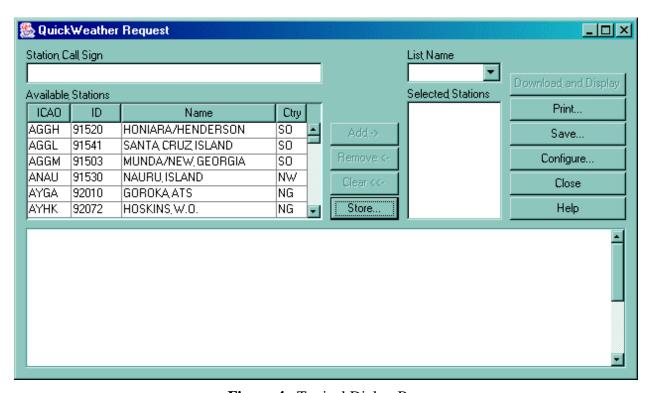


Figure 4. Typical Dialog Box

4.1.2 Access Control

There is no access control specific to Quick Weather; the System Administrator controls access to the software on the host machine through granting of user accounts and privileges.

4.1.3 Installation and Configuration

The *Quick Weather Installation Procedures (IP)* referenced in Section 2 provide complete instructions for installation of the METCAST Client software.

4.2 Initiating a Session

To start Quick Weather, double-click on the desktop icon.

4.3 Stopping and Suspending Work

You can stop Quick Weather or by clicking the Close button 🗷 at the upper right corner of the Quick Weather Request window.

5 USING QUICK WEATHER

This section shows you how to use Quick Weather's Browser to select stations and to view the data you have retrieved.

5.1 The Basics

To use METCAST Client to retrieve and view data, follow this set of steps:

- 1. <u>Configure the Server</u>. Section 4.1 shows how to configure the server from which Quick Weather will retrieve the requested data. This must be done before you can retrieve and view data. To reconfigure Quick Weather to use a different server at any time, click on the **Configure** button to open the server configuration dialog.
- 2. Select stations to retrieve. The first step in normal use of Quick Weather (after the initial configuration of the server) is to select stations. The Quick Weather browser shows two lists of stations. The left-hand list shows all stations that are available; the right-hand list shows stations that are selected for download. The Add-> and <-Remove buttons allow you to move stations between the two lists, and the <<-Clear button lets you clear all stations from the Selected Stations list. Detailed instructions on selecting stations for display are provided in Section 5.2.</p>
- 3. Retrieve data. Once you have selected the stations to be downloaded, click on the **Download** and **Display** button to download METAR and SPECI reports and TAF forecasts from the selected stations and view them on screen. Once data have been retrieved, you can use the **Print** button to send the data to the printer, and the **Save** button to save the retrieved data in a text file.

5.2 The Quick Weather Browser

After configuring a server connection on the initial run of Quick Weather, or when you start the program thereafter, the Quick Weather dialog shown below in Figure 5 will be displayed. This dialog is used to retrieve and display station data (METAR and SPECI reports, and TAF forecasts).

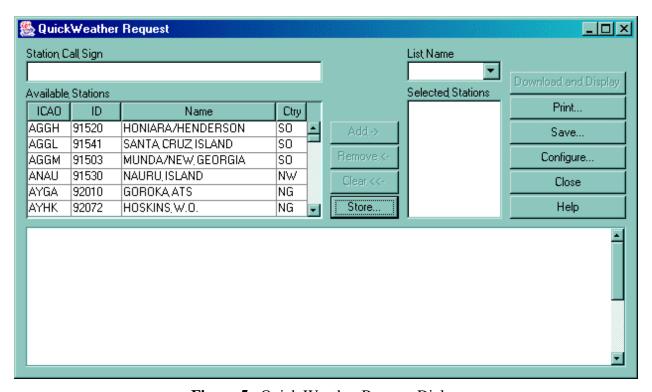


Figure 5. Quick Weather Request Dialog

5.2.1 Selecting Stations.

The **Available Stations** list box displays all of the stations that area available for download. By default, this list is sorted alphabetically by station ICAO call sign. This list may be sorted by clicking on any of the four available parameters located at the top of the available stations list box.

- **ICAO** Sorts alphabetically by ICAO call sign.
- **ID** Sorts numerically by the station identification numbers.
- Name Sorts alphabetically by Station name.
- **Ctry** Sorts alphabetically by country code.

Station selection may be made via the following three methods:

- 1. Type the station's ICAO call sign in the **Station Call Sign** box. When a station's call sign is displayed in the **Station Call Sign** box, either click the **Add->** button or press the **Enter** key to move the station into the **Selected Stations** box. Note that when you press the **Enter** key, the entry in the **Station Call Sign** box is highlighted, meaning that you can overtype it with another selection.
 - Generally, the easiest and most efficient method to select multiple stations is to type a station's call sign, press **Enter**, type another call sign, press **Enter**, and continue until all of the desired stations have been added to the **Selected Stations** window.
- 2. Multiple consecutive stations may be selected from the **Available Stations** list box by single clicking on the first desired station, then scrolling down to the last desired station and clicking on it while simultaneously pressing the **Shift** key. This will highlight the first and last stations, as well as all stations in between. Next, click either the **Add->** button or press **Enter** to add all of the selected stations to the **Selected Stations** list box.
 - Multiple non-consecutive stations may be selected in a similar manner. Hold down the **Ctrl** key while single clicking on the first desired station, then scroll though the available stations list and click on all other desired stations while simultaneously pressing the **Ctrl** key. Click on the **Add->** button to add the selected stations to the **Selected Stations** list box.
- 3. Select the desired station(s) from the scrollable list of **Available Stations** by double clicking on the station name (or on any of the other three parameter columns). This will add the station to the **Selected Stations** list box. Stations may also be added to the **Selected Stations** list by single clicking on the station name to highlight it, then either clicking on the **Add->** button or pressing the **Enter** key.

The **Remove->** button is used to remove a station from the **Selected Stations** list box. Select a station for removal by clicking on its ICAO call sign; this will highlight the call sign and activate the Remove button. Next, click the Remove button to move the station back to the **Available Stations** list box.

The Clear-> button clears all entries from the Selected Stations list box.

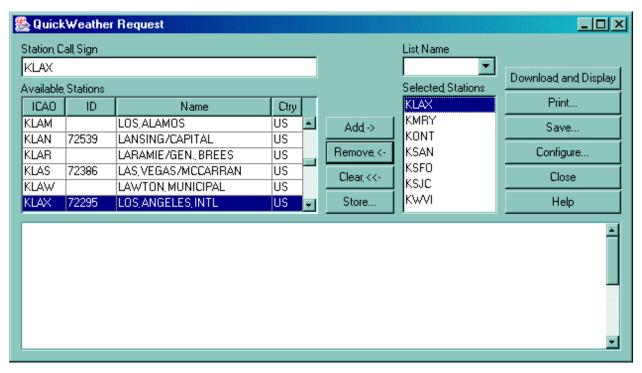


Figure 6. Quick Weather Request Dialog With Station Selections

5.2.2 Downloading and Displaying Station Data

Figure 6 above shows the Quick Weather Request dialog with several stations selected. Note that when one or more stations are selected, the **Download and Display** button is activated. Click this button to download and display reports for the stations you have selected. The Quick Weather Request dialog box with station data displayed is shown in Figure 7 below.

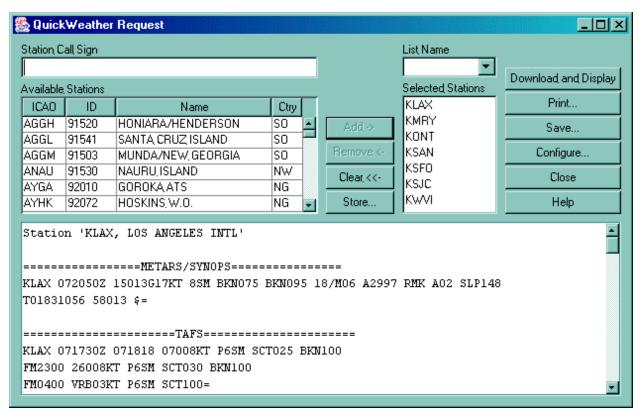


Figure 7. Quick Weather Request Dialog With Downloaded Reports

The reports are displayed station by station (i.e. all reports for KLAX, then all for KMRY, etc.). Note that METARs, SPECIs, and TAFs are all downloaded.

5.2.3 Creating, Modifying and Deleting a Station List

The **Store...** button is used to save frequently viewed stations as a **Station List**. Once created, a Station List allows the user to quickly retrieve and display station data for multiple stations. After all of the desired stations have been added to the **Selected Stations** list box, click on the **Store...** button to open the **Station List Name** Dialog box shown in Figure 8 below.



Figure 8. Station List Name Dialog

Enter a name for the Station List in the **Enter name of list** text box and then click on the **OK** button. The selected stations will be stored as a named station list within the **List Name** pull down menu in the **Quick Weather Request** dialog box as shown in Figure 9 below.

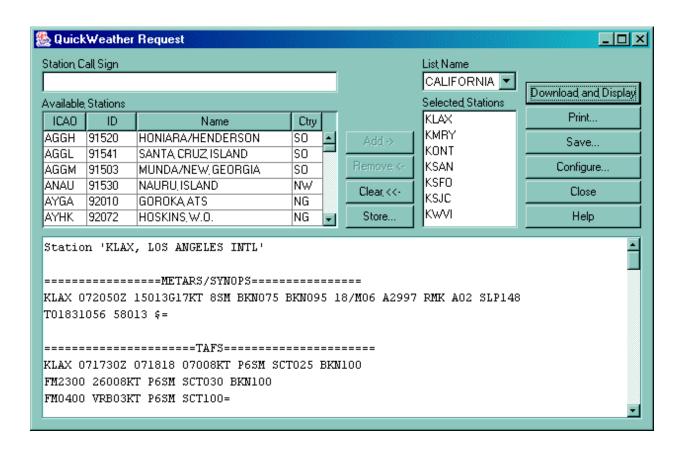


Figure 9. Quick Weather Request dialog with a saved Station List.

To view current station data for a previously created Station List, simply select the Station List name from the **List Name** pull down menu by clicking on it, and then click the **Download and Display** button. Updated station data will then be displayed.

To create additional Station Lists, select an existing station list from the pull down **List Name** menu and click on the **Store...** button. The **Station List Name** dialog box will appear. Enter a new Station List Name and click the **OK** button. The new Station List will initially contain the same stations as the originally selected list. To remove these stations simply click the **Clear...** button. New stations may now be added to the new station list. After all of the desired new stations have been added to the list, click on the **Store...** button once more to save the new inputs. Multiple station lists will be listed alphabetically within the pull down List Name menu.

A **Station List** may be **modified** by first selecting the desired list from the **List Name** pull down menu and then by adding or deleting stations as described in steps one through three above. When the modifications are complete, click on the **Store...** button. The **Station List Name** dialog box will open, with the original Station List name highlighted in the Text Box. To save the modifications to the original Station List name, simply click the **OK** button. A new Station

List may be created at this time by typing a new station list name in the text box and clicking on the **OK** button. If a new station list name is input, the original station list will remain unchanged.

To **delete** a Station List, select the desired list from the **List Name** drop down menu then click the **Clear...** button to remove all of the selected stations. Next, click on the **Store...** button. A **Delete Station List** Dialog box will appear as shown Figure 10 below. Click the **Yes** button to delete the list. Clicking the **No** or **Cancel** buttons will close the dialog box without deleting the station list name. Note however, that there will be no stations associated with the List Name.



Figure 10. Delete Station List Dialog.

5.2.4 Using the Print, Save, Configure, and Close Buttons.

The **Print...** button allows you to print the displayed reports to the default printer.

The **Save...** button opens a File Save dialog that lets you save the list of reports as a text file for future reference.

The **Configure** button opens the Configure Data Source dialog shown in Section 4.1 to allow you to change the server configuration.

The **Close** button is used to exit the Quick Weather program.

6 NOTES

6.1 Glossary of Abbreviations

COE Common Operating Environment

DII Defense Information Infrastructure

FNMOC Fleet Numerical Meteorology and Oceanography Center

GUI Graphical User Interface

HTTP Hyper-Text Transfer Protocol

ICAO International Civil Aviation Organization

IP Installation Procedures

JMV Joint METOC Viewer

METOC Meteorological and Oceanographic

MIME Multipurpose Internet Mail Extensions

PC Personal Computer

SPAWAR Space and Naval Warfare Systems Command

SVD Software Version Description

TAC Tactical Advanced Computer

UM User's Manual

URL Uniform Resource Locator

7 KNOWN PROBLEMS AND WORKAROUNDS

The following known problems are currently being worked on:

1. Some users have expressed a desire to be able to enter multiple station Ids in the entry box, separated by spaces, so that they can enter multiple stations at a time. We suggest entering a station ID, pressing the **Enter** key, then repeating these operations to complete the station list. This involves no more keystrokes than the method suggested by users, merely requiring the **Enter** key to be pressed rather than the space bar between station IDs.

8 DOCUMENTATION IMPROVEMENT AND FEEDBACK

Comments and other feedback on this document should be directed to the DII COE Hotline:

Phone: 703-735-8681 Fax: 703-735-3080

Email: HotlineC@ncr.disa.mil